

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. 2003-NE-11-AD; Amendment 39-13338; AD 2003-21-03]**

**RIN 2120-AA64**

### **Airworthiness Directives; Pratt & Whitney Canada Models PW118, PW120, PW120A, and PW121 Turboprop Engines**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

---

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for Pratt & Whitney Canada (PWC) models PW118, PW120, PW120A, and PW121 turboprop engines. This AD requires replacing the low pressure rotor speed (NL) sensor port sealing tube and reworking or replacing the external air tube connecting the P2.5/P3 switching valve to the rear inlet case. This AD is prompted by a report of an internal oil fire in the engine intercompressor case (ICC). A fire in the ICC could cause the existing tubes to disengage due to melted brazing on the tubes. Once these tubes disengage, the ICC fire then develops into an external fire within the engine nacelle cavity. We are issuing this AD to prevent fire in the engine nacelle cavity, in-flight engine shutdown, and airplane damage.

**DATES:** This AD becomes effective November 20, 2003. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of November 20, 2003.

**ADDRESSES:** You can get the service information identified in this AD from Pratt & Whitney Canada, Technical Publications Department, 1000 Marie Victorin, Longueuil, Quebec J4G 1A1.

You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA. You may examine the service information, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Ian Dargin, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7178; fax (781) 238-7199.

**SUPPLEMENTARY INFORMATION:** The FAA proposed to amend 14 CFR part 39 with a proposed airworthiness directive (AD). The proposed AD applies to PWC models PW118, PW120, PW120A, and PW121 turboprop engines. We published the proposed AD in the Federal Register on June 6, 2003 (68 FR 33885). That action proposed to require replacing the low pressure rotor speed (NL) sensor port sealing tube and reworking or replacing the external air tube connecting the P2.5/P3 switching valve to the rear inlet case.

### **Corrections to Accomplishment Paragraph References in the Compliance**

Since the issuance of the notice of proposed rulemaking (NPRM), we found that the Accomplishment paragraphs referenced in compliance paragraphs (g), (h), (h)(1), and (h)(2) of the proposed rule are incorrect because of a change in service bulletin revisions. This AD corrects those Accomplishment paragraph references.

### **Comments**

We provided the public with the opportunity to participate in the development of this AD. We have considered the comments received.

### **Request Credit for Compliance With Earlier Versions of Service Bulletin**

Two commenters state that there is no reference in the NPRM to the original service bulletin (SB) or any earlier revisions. The commenters have received confirmation from the manufacturer that the original SB and earlier revisions are technically equivalent to PWC SB No. 20914, Revision 4, dated December 14, 2001. Therefore, they are requesting that compliance with the original SB or any earlier revisions be permitted as full compliance with the intent of the AD and that no further action be required.

The FAA agrees. The AD is revised to add new compliance paragraph (f). The regulatory section of this AD is renumbered from (e), (f), (g), (h), (i), and (j) to (e), (f), (g), (h), (i), (j), and (k).

### **Conclusion**

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

### **Changes to 14 CFR Part 39—Effect on the AD**

On July 10, 2002, the FAA published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's AD system. That regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. The material previously was included in each individual AD. Since the material is included in 14 CFR part 39, we will not include it in future AD actions.

### **Regulatory Findings**

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES. Include "AD Docket No. 2003-NE-11-AD" in your request.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends 14 CFR part 39 as follows:

### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "www.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2003-21-03 Pratt & Whitney Canada:** Amendment 39-13338. Docket No. 2003-NE-11-AD.

## **Effective Date**

- (a) This AD becomes effective November 20, 2003.

## **Affected ADs**

- (b) None.

## **Applicability**

(c) This AD applies to Pratt & Whitney Canada (PWC) models PW118, PW120, PW120A, and PW121 turboprop engines. These engines are installed on, but not limited to, Empresa Brasileira de Aeronautica (EMBRAER) EMB-120RT, 120ER, and 120FC, Bombardier Inc. (formerly Dehavilland of Canada) DHC-8-100 series, and Aerospatiale ATR 42-200, -300, and -320 airplanes.

## **Unsafe Condition**

(d) This AD is prompted by a report of an internal oil fire in the engine intercompressor case (ICC). A fire in the ICC could cause the existing tubes to disengage due to melted brazing on the tubes. Once these tubes disengage, the ICC fire then develops into an external fire within the engine nacelle cavity. We are issuing this AD to prevent fire in the engine nacelle cavity, in-flight engine shutdown, and airplane damage.

## **Compliance**

(e) Compliance with this AD is required at the next engine shop visit, or within 90 days after the effective date of this AD, whichever occurs first, unless already done.

## **Credit for Previous Replacements and Rework**

(f) Replacements and rework performed before the effective date of this AD, using PWC Service Bulletin (SB) No. 20914, Revision 4, dated December 14, 2001, the original issue, or Revision 1, 2, or 3, satisfy the requirements of paragraphs (g) through (h) of this AD.

## **Low Pressure Rotor Speed (NL) Sensor Port Sealing Tube**

(g) Replace the low pressure rotor speed (NL) sensor port sealing tube with an improved durability tube, in accordance with paragraphs 3.A.(1) and 3.A.(2), Accomplishment Instructions of PWC SB No. 20914, Revision 4, dated December 14, 2001.

## **Switching Valve-to-Rear Inlet Case Sealing Air Tube Assembly**

(h) Remove the switching valve-to-rear inlet case sealing air tube assembly, in accordance with paragraph 3.B.(1), Accomplishment Instructions of PWC SB No. 20914, Revision 4, dated December 14, 2001, and do the following:

(1) Either install an improved durability switching valve-to-rear inlet case sealing air tube assembly, in accordance with paragraph 3.B.(9), Accomplishment Instructions of PWC SB No. 20914, Revision 4, dated December 14, 2001; or

(2) Rework the switching valve-to-rear inlet case sealing air tube assembly and install tube assembly, in accordance with paragraphs 3.B.(2), 3.B.(4), and 3.B.(9), Accomplishment Instructions of PWC SB No. 20914, Revision 4, dated December 14, 2001.

## **Alternative Methods of Compliance**

(i) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

## **Material Incorporated by Reference**

(j) You must use Pratt & Whitney Canada Service Bulletin No. 20914, Revision 4, dated December 14, 2001 to perform the actions required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You can get a copy from Pratt & Whitney Canada, Technical Publications Department, 1000 Marie Victorin, Longueuil, Quebec J4G 1A1. You can review copies at FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

## **Related Information**

(k) Transport Canada airworthiness directive No. CF-2002-10, dated January 28, 2002, also addresses the subject of this AD.

Issued in Burlington, Massachusetts, on October 6, 2003.  
Francis A. Favara,  
Acting Manager, Engine and Propeller Directorate, Aircraft Certification Service.  
[FR Doc. 03-25865 Filed 10-15-03; 8:45 am]  
BILLING CODE 4910-13-P